# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the matter of	)	
Interference Immunity Performance	)	ET Docket No. 03-65
Specifications for Radio Receivers	)	
	)	
Review of the Commission's Rules and	)	MM Docket No. 00-39
Policies Affecting the Conversion to	)	
Digital Television	)	

To: The Commission

#### **COMMENTS**

Metrocall Holdings, Inc., Arch Wireless Operating Company, LLC, Weblink Wireless I, L.P., the Allied National Paging Association and the American Association of Paging Carriers (collectively, "Joint Commenters") hereby submit their comments on the Commission's *Notice of Inquiry* in ET Docket No. 03-65 ("*NOP*"). The Joint Commenters comprise a representative cross-section of the paging/messaging industry and, as explained herein, do not believe that new interference immunity performance specifications are required for paging units and other narrowband messaging devices. The Joint Commenters respectfully submit that attempts to impose such standards for devices used in this industry would do far more harm than good and ultimately have a negative impact on consumers.

### I. Interference Immunity Specifications for Messaging Units are Unnecessary

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<sup>&</sup>lt;sup>1</sup> Interference Immunity Performance Specifications for Radio Receivers, Notice of Inquiry, FCC 03-54 (released March 24, 2003) (the "Notice" or "NOP"). The NOI was published in the Federal Register on May 5, 2003, which established a comment deadline of July 21, 2003. See 68 Fed. Reg. 23677.

The *NOI* asks for a wide range of comments regarding the implementation of interference immunity specifications for radio receivers, the current spectrum environment in which various receivers currently operate, and a host of other issues. The Commission specifically questions whether immunity specifications are needed for receivers used in providing commercial mobile services, and if so, whether those standards should be more stringent for mobile services than for other radio services.<sup>2</sup>

As an initial matter, the Joint Commenters emphasize that the interference problems and dangers discussed in the *Spectrum Policy Task Force Report*<sup>3</sup> and this *NOI* are inapplicable to the paging/messaging industry. Narrowband carriers have far less spectrum per licensed channel than other, licensed wireless service providers – a mere 25 kHz for traditional paging licenses, and 50 kHz for each of the inbound and outbound channels for the largest of the Narrowband Personal Communications Services ("NPCS") allocations. Traditional paging frequencies are heavily encumbered, and in numerous instances more than one carrier shares a paging channel in the same market.

In this challenging technical and operational environment,

paging/messaging carriers have effectively avoided interfering with each other's systems

– and with other wireless systems – by deploying highly efficient networks that minimize interference, message delivery delays and transmission errors. 

The efficiency of these networks is dependent in part upon the sensitivity of the receiving units, which are highly

<sup>2</sup> *NOI* at ¶ 29.

<sup>&</sup>lt;sup>3</sup> Federal Communications Commission, Spectrum Policy Task Force Report (2002), available at

http://www.fcc.gov/sptf ("Spectrum Policy Task Force Report").

<sup>4</sup> This situation contrasts sharply, for example, with the instances of interference and related complex

This situation contrasts sharply, for example, with the instances of interference and related complex technical issues occurring in the interleaved 800 MHz bands. See In the Matter of Improving Public Safety Communications in the 800 MHz Band; Consolidating the 900 MHz Industrial/Land Transportation and Business Pool Channels, Notice of Proposed Rulemaking, 17 FCC Rcd 4873 (2002).

selective. Further, paging/messaging carriers have continuously adopted and deployed increasingly efficient standards and protocols to maximize coverage, network reliability and speed in response to customer expectations and a fiercely competitive paging/messaging industry. Adopting new or different receiver interference immunity performance standards for paging/messaging units is simply unnecessary.

If, despite this fact, the Commission nonetheless believes some action must be taken, the Joint Commenters urge the Commission to allow the industry to develop the specifications which should then be applicable on a voluntary basis. The essentially interference-free, highly spectrally-efficient state of the paging/messaging industry exists because the Commission has allowed the industry to adopt and implement industry protocols and specifications on a voluntary basis. Indeed, the messaging industry has had an exemplary history of addressing interference and other technical issues by voluntarily developing and adhering to continuously evolving efficient standards and protocols. Most recently, the industry developed voluntary CALEA Specifications for Traditional Paging and Advanced Messaging in 1998-2000, without any Commission encouragement or guidance.

<sup>&</sup>lt;sup>5</sup> The Commission has often expressed a preference for allowing market forces to determine the technologies and services deployed by carriers. *See NOI* at ¶ 18. Market forces, combined with the Commission's existing, flexible policies, are working exceptionally well in the paging/messaging industry, producing spectrally-efficient, reliable networks capable of serving millions of customers at low prices. The Commission's own records reflect the success of the current system. *See Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, Eighth Report, FCC 03-150, ¶ 142 (rel. July 14, 2003) ("Eighth CMRS Competition Report").* 

<sup>&</sup>lt;sup>6</sup> See Personal Communications Industry Association, CALEA Suite of Standards for Traditional Paging, Advanced Messaging, and Ancillary Services (May 2000), available at http://www.pagingcarriers.org/PTCdocs/CALEA Suite v1p3.pdf.

Minimal Commission intervention on technical matters has facilitated a mature, stable industry that provides reliable, low cost messaging services – an industry the Commission describes as the most highly competitive of all wireless services, with multiple carriers in all locations.<sup>7</sup> There is no reason for the Commission to intervene now and promulgate technical specifications with respect to paging/messaging receivers. In fact, as explained below, to do so would be harmful and disruptive to the industry and ultimately would disserve consumers, including public safety personnel, who subscribe to messaging because of its reliability and low cost.

## II. Imposing New Regulatory Requirements on the Paging/Messaging Industry <u>Would Disserve the Public Interest</u>

As previously noted, the paging/messaging industry is exceptionally competitive. Messaging carriers compete not only with each other, but also with broadband CMRS carriers and other wireless data providers such as Earthlink, GoAmerica and RIM. The industry has experienced well-documented financial hardship and contraction in recent years, with its subscriber base continuing to decline; however, as the Commission noted in the recently released *Eighth CMRS Competition Report*, there remains a viable market for paging/messaging services. The industry's advantages are

<sup>&</sup>lt;sup>7</sup> See, e.g., Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, Seventh Report, 17 FCC Rcd 12985, 13049 (2002) ("Seventh CMRS Competition Report") (noting that in addition to the four largest carriers, there are "hundreds of smaller paging operators" competing in the marketplace).

 $<sup>^8</sup>$  See, e.g., Seventh CMRS Competition Report at 13049-50; Eighth CMRS Competition Report at ¶ 142.

 $<sup>^9</sup>$  Eighth CMRS Competition Report at ¶ 142; Seventh CMRS Competition Report at ¶ 13050.

<sup>&</sup>lt;sup>10</sup> *Id.* at ¶ 140.

<sup>&</sup>lt;sup>11</sup> *Id.* at ¶ 141.

<sup>&</sup>lt;sup>12</sup> *Id*. at ¶ 142.

its technological efficiencies, reliability and low cost.<sup>13</sup> Paging services are therefore attractive to a broad range of individual consumers as well as numerous medical, law enforcement and other public safety organizations and first responders who require rapid, reliable communications on limited budgets.<sup>14</sup>

Because of the level of competition within the industry and the budgetary constraints of the industry's core customer bases, paging/messaging services are extremely price-sensitive. If increased network or equipment costs required all paging/messaging carriers to raise their prices, many customers would likely turn to other kinds of wireless service providers that, because of their larger spectrum allocations and customer base, can provide a broader array of services at lower costs, including offering paging/messaging at no charge. Conversely, paging/messaging carriers have limited ability to maintain prices at current levels if equipment or network costs rise; the margins in the paging/messaging industry are notoriously thin, with little or no surplus. The Joint Commenters are not asking the Commission to salvage the paging/messaging industry.

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<sup>&</sup>lt;sup>13</sup> See, e.g., id. at ¶ 142.

<sup>&</sup>lt;sup>14</sup> The Joint Commenters note that the Commission is considering whether to adopt stricter specifications for public safety radio systems than commercial systems. NOI at ¶ 25. If the Commission should do so, commercial paging and messaging services should not be subject to the same standards as those systems. First, regardless of its popularity among governmental and non-profit safety organizations, CMRS messaging is an interconnected commercial service, designed to serve all interested customers. To the extent that the imposition of particularly strict standards would increase the costs of paging units, those standards would effectively limit the communications options of consumers generally. Secondly, the imposition of those increased costs might also eliminate messaging as the most economically viable, commercial service option available to those public safety entities that do not choose, or cannot afford, to operate their own radio systems. The governmental and non-profit entities that generally provide "public safety" functions are often subject to severe budgetary constraints; if the imposition of strict receiver specifications on public safety radio systems makes those systems more expensive to implement, many more public safety entities may find the costs of operating their own systems prohibitive. If the Commission concurrently raises the costs of paging equipment, the most economical commercial alternative currently available to public safety entities may likewise become priced beyond many of those organizations' means. That result, surely unintended by the Commission, would not serve the public interest.

They are merely asking that the Commission not saddle the industry with unnecessary costs.

The *NOI* asks which receiver design parameters are more important. The simple answer is that they are all important, but optimizing receiver design necessitates tradeoffs among all of the performance specifications, which must then be balanced with cost. If the Commission adopts interference immunity performance specifications that are too permissive, this will encourage the use of substandard devices, thereby reducing network reliability. To prevent this, carriers will have to engage in very costly network infrastructure modifications that would otherwise be unnecessary and which they cannot otherwise afford. If the Commission adopts specifications that are too restrictive, the cost of the consumer devices will increase. This will further threaten the market for low cost paging/messaging services.

With only 14.1 million units in service as of year end 2002, <sup>16</sup> the paging/messaging industry cannot afford additional declines in its subscriber base. Because paging/messaging carriers have little or no ability to absorb additional costs in their bottom line, or to distribute such costs across a growing subscriber base, consumers – including many of the country's first responders, who comprise a significant portion of the industry's customer base – will bear a significant portion of the increased network or device costs, whether Commission-mandated specifications are too restrictive or too permissive.

<sup>&</sup>lt;sup>15</sup> *NOI* at ¶ 14.

<sup>&</sup>lt;sup>16</sup> Eighth CMRS Competition Report at ¶ 141.

Moreover, if the costs of complying with new standards are significant, those costs will further erode operating margins and stifle incentives for manufacturers to continue developing new messaging products. In such an event, it would become increasingly difficult, if not impossible, for messaging carriers to reliably and economically serve subscribers. This outcome would disserve the public interest, and the Commission is obligated to consider such industry disruptions in its regulatory actions.<sup>17</sup>

# III. The Interference Environment in Which Receivers Operate is Complicated and Multi-Dimensional and Cannot be Managed with Mandatory Standards or Interference Temperature Protocols

Attempting to manage receiver design standards by government fiat rather than marketplace competition is a continuation of the conceptual framework first articulated in the Commission's Spectrum Task Force proceeding. Specifically, the *NOI* seeks to build on the premise that it is possible to transition from an interference management paradigm in which a finite universe of transmitter classes and radio services are regulated, to an "interference temperature" paradigm in which the cumulative RF environment as it exists in every point in space and time would be regulated. The Joint Commenters recognize that adopting mandatory receiver performance standards would likely be a necessary component of such an undertaking. It remains to be seen whether such a concept – which would involve technical, managerial and regulatory complexity beyond anything the Commission or any other federal agency has ever attempted –

<sup>&</sup>lt;sup>17</sup> See In the Matter of Access Charge Reform; Price Cap Performance Review for Local Exchange Carriers; Transport Rate Structure and Pricing End User Common Line Charges, First Report and Order, 12 FCC Rcd. 15982, 16002 (1997); See also National Ass'n of Regulatory Utility Commissioners v. FCC, 737 F.2d 1095, 1136 (D.C.Cir. 1984), cert denied, 469 U.S. 1227 (1985) (upholding exemption "to avoid necessary customer impact or market displacement.").

<sup>&</sup>lt;sup>18</sup> See Spectrum Policy Task Force Report, supra n. 3.

<sup>&</sup>lt;sup>19</sup> See Id..

represents a feasible approach to improving spectrum management in the near term.

Until such time as this concept becomes more practical, or such standards become necessary in the paging/messaging industry, the Joint Commenters strongly urge the Commission to allow the industry to continue to monitor and adjust its own technical standards. There is simply no justification or practical reason to change the current dynamics, especially when to do so would threaten an entire industry segment. The current approach has proved to be highly successful and adaptive.

### Conclusion

For all the foregoing reasons, the Joint Commenters respectfully submit that the Commission should not impose any receiver standards or guidelines for paging/messaging and NPCS services.

Respectfully submitted,

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